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Megachile cygnorum Ckll.

Adelaide (*Schomburgk*); eastern Australia (*Preiss*). One specimen bears a label stating it to be the male of *maculata* Smith (*macularis* D. T.); it is possible that this reference is correct, but the hair of the face is much lighter than "golden yellow," and there are apparently other differences.

NEW SPECIES OF PSAMMOCHARIDÆ.

BY NATHAN BANKS,

EAST FALLS CHURCH, VA.

The generic term, *Psammochares*, was first used by Latreille in his "Precis." As with other genera in this work, no species was mentioned. Its next appearance is in the *Histoire Naturelle*, Vol. III., 1802, where, under the genus *Pompilus*, Latreille says that he had previously called this genus *Psammochares*, but prefers *Pompilus*, since it is "*plus douce des oreilles*." A species is given, so that *Psammochares* must date from 1802; others there are who would date in from the "Precis," 1796. In Latreille's later works *Psammochares* appears as a synonym of *Pompilus*, but it appears to have escaped most of the cataloguers. *Pompilus* is unfortunately preoccupied, so that *Psammochares* will replace it. Mr. Fox has suggested *Anoplius*, 1830, to replace *Pompilus*, overlooking *Psammochares*. Mr. Fox has suggested also that the family be called Ceropalidæ; but *Ceropales* was proposed in the same work as *Psammochares*, and on a later page; moreover, some writers consider the Ceropalidæ as a family just for the genus *Ceropales*; therefore I shall employ Psammocharidæ.

***Psammochares albomarginatus*, new species.**

Male.—Black, with dense silvery pubescence, especially on face, prothorax, pleura, coxæ and posterior metathorax. Clypeus broad, truncate in front; a faint line from antennæ to ocelli; anterior ocellus fully its diameter from laterals; vertex nearly straight across; antennæ short and thick; head white-haired behind and silvery; pronotum angulate behind, posterior margin distinctly white; metathorax short and sloping, with a median groove; abdomen slender, subcylindrical, apical segment depressed, and gray-haired above,

penultimate and preceding segment below with a few long hairs near apical margin, but no brush. Wings rather smoky, broadly darker on tip, marginal cell short, second submarginal narrowed above, third petiolate or almost so, receiving the second recurrent vein beyond middle, this vein barely bent, and arising slightly before middle of anal cell; veins not reaching apical margin. Legs slender, distinctly spined, a few on hind femora above before tip; longer spur of hind tibiæ fully two thirds length of metatarsus. Length, 10 mm.

From Falls Church, Va., May to July. Resembles *P. virginiensis*, but has white margin to pronotum.

Psammochares angularis, new species.

Male.—Small, black, face below the antennæ rather grayish; clypeus broad, short, convex in front; antennæ rather short, eyes approaching above, but inner orbits are barely concave; anterior ocellus about its diameter from smaller laterals, these as near to the eyes as to each other; vertex nearly straight across; pronotum short, angulate behind, metathorax only slightly and evenly convex, a distinct median groove; abdomen narrow, cylindrical, last segment dull; legs short, femora rather heavy and tibiæ quite broad at tips; spines very small and short; longer spur of hind tibiæ hardly two thirds the length of metatarsus; wings black, darker on tip; marginal cell very short, second submarginal cell almost triangular, being narrowed nearly to a point above, receiving the first recurrent beyond middle; third submarginal triangular, almost petiolate; the second recurrent arising scarcely one fourth way out on anal cell, and meeting the third submarginal before middle; the second discoidal cell is, therefore, extremely short, in fact much broader than long; basal veins interstitial in fore wings, dislocated in hind wings. Length, 6.5 mm.

From Claremont, Cal. (Baker). Related to *P. cylindricus*, but readily separated by shape of the second submarginal and second discoidal cells, and by shorter spurs of hind tibiæ.

Psammochares arizonica, new species.

Black, abdomen red; all clothed with dense silvery pile. Clypeus broad, truncate or almost emarginate in front, margined; no line from antennæ to ocelli; antennæ short, fully as long as width of vertex; vertex straight across; inner orbits slightly concave above; face with long black hairs, and dense silvery pile, almost forming a spot on middle of clypeus; pronotum short, arcuate behind, posterior margin and across middle silvery, connected on middle, leaving only a slender triangle of black each side; mesothorax silvery in front of, and each side of scutellum; metathorax silvery, leaving only a large black spot each side near base, a median groove. Abdomen reddish above and below, with black hair near tip, abdomen rather broad, and somewhat depressed; coxæ and legs silvery on the tibiæ, leaving black stripes, anterior tarsi strongly ciliate; longer spur of hind tibiæ rather more than one

half the length of metatarsus; legs strongly spined. Wings fuscous, rather paler in some of the cells, marginal cell not very long, acute at tip, second submarginal longer than broad, receiving the first recurrent at tip; third submarginal almost triangular, nearly as long as second, receiving the second recurrent a little before middle, this vein curved outward, and arising beyond middle of anal cell; in hind wings the basal veins are interstitial, as in the fore wings. Length, 17 mm.

From Palmerlee, Arizona, May (Biederman).

***Psammochaeres biedermani*, new species.**

Male.—Black, with sericeous pubescence, almost all over, except on the tibiae and tarsi, very dense on the metathorax; last segment of abdomen white above, the genitalia jet black on tip. Clypeus rounded in front, a line from the antennae to ocelli; anterior ocellus nearly twice its diameter from the laterals; antennae moderately slender; vertex slightly rounded; anterior orbits but little concave; pronotum short, posterior margin angulate, constricted; metathorax short, evenly rounded; abdomen elongate, fusiform. Legs slender, first pair small, coxae I not reaching more than two thirds way to coxae II, mesosternum emarginate in middle behind; femur I slender; all tibiae with very short spines; longer spur on hind tibiae but little more than one half the length of metatarsus; all tarsi very long; last joint of hind tarsi without spines beneath. Wings hyaline, apex fumose; basal veins interstitial, marginal cell long, acute, second submarginal longer than broad, receiving the first recurrent much before the tip; third submarginal shorter than the second, narrowed above, second recurrent arising much beyond middle of the anal cell, running nearly straight up to the middle of the third submarginal; stigma black; basal veins of hind wings almost interstitial. Length, 8 mm.

From Palmerlee, Arizona, July (Biederman).

***Psammochaeres birkmanni*, new species.**

Male.—Black, with silvery pubescence. Clypeus rounded in front, vertex slightly convex, a faint line from ocelli to antennae, antennae thick and stout, not reaching to end of thorax, few hairs on head and thorax, except fine pubescence; pronotum silvery, with a median line, posterior border arcuate, pleura and coxae silvery; metathorax sloping, broad, silvery; abdomen short, silvery pubescence on apex of segments and on the sides; legs slender, almost devoid of spines, or only very small ones on tibiae; longer spur of hind tibia nearly as long as metatarsus. Wings hyaline, tip slightly infuscated; marginal cell acute; second submarginal a little narrowed above, receiving the first recurrent vein before tip; third submarginal a little larger than second, slightly narrowed above; the second recurrent vein arising beyond the middle of anal cell, bending a little outward at middle, and meeting the third submarginal beyond middle; the veins extend out to the apical margin of wing. Length, 5 mm.

From Fedor, Lee Co., Texas, Sept. (Birkmann).

In general appearance much like *P. argenteus*, but differs in shape of third submarginal cell, in veins running to margin of wings, smaller spines on legs, etc.

***Psammochares californica*, new species.**

Male.—Black, head with much long black hair, hair on thorax much shorter; hind tibiæ with an elongate white spot above at base, spurs black; wings faintly infusate, broadly black tipped. Clypeus rather concave in front; antennæ short and thick; anterior ocellus scarcely its diameter from laterals, these much nearer each other than to eyes, vertex plainly rounded; pronotum arcuate, almost transverse, metathorax short, convex, bent down behind, no median groove, abdomen short, broad at base, dull beyond second segment, depressed. Legs rather short and heavy, with long spines, longer spur of hind tibiæ two thirds as long as metatarsus. Wings rather long, marginal cell long, acute, second and third submarginal cells subequal, second acute at base, third one half narrowed above; first recurrent near middle; second recurrent arising a little beyond middle of anal cell, slightly bent outward below the middle, and meeting the third submarginal at middle; basal veins interstitial in fore wings, not in hind wings. Length, 8 mm.

From Claremont, Cal. (Baker).

Related to *P. humilis* and *P. snowi*. From the former it differs in markings of wings, from the latter by the dark spurs.

***Psammochares fulvoapicalis*, new species.**

Female.—Black, black hair on head and thorax. Clypeus large, rounded or narrowly truncate in front, distinctly margined; a line from antennæ to ocelli, anterior ocellus hardly its diameter from laterals; vertex nearly straight across; inner orbits slightly concave; antennæ short, convolute, third joint hardly as long as vertex; pronotum angulate behind; metathorax short, much bent downward, with medium groove, sides rather rusty; abdomen slender, cylindrical and compressed toward tip, the last segment mostly fulvous, with some black hairs; legs slender, spiny, anterior femora cylindrical, their coxæ nearly reaching coxæ II, anterior tarsi ciliate, longer spur of hind tibiæ two thirds as long as metatarsus, last joint of hind tarsus beneath without spines. Wings deep black; marginal cell long, acute; second and third submarginals long, subequal in length, both narrowed above; second recurrent vein arising very much beyond middle of anal cell, running nearly straight up to middle of third submarginal, second discoidal being very long; basal veins interstitial in fore wings, much dislocated in the hind wings. Length, 12 to 14 mm.

From Fedor, Lee Co., Texas, Sept. (Birkmann).

***Psammochares maneei*, new species.**

Female.—Black, lower part of face slightly gray pubescent. Clypeus

truncate in front, vertex broad, slightly convex, antennæ rather short and slender, third joint nearly twice as long as first, much shorter than vertex width; anterior ocellus more than two diameters from the laterals. Pronotum long, posterior margin barely arcuate, almost transverse; metathorax moderately long, evenly convex, not widened behind; abdomen subovate, but little longer than thorax, base very broad. Legs rather stout, very spiny, anterior tarsi ciliate, each curved spine more than twice as long as the width of the joint; longer spur of hind tibia three fourths length of metatarsus, last joint of hind tarsi with minute spines beneath; tibia I with distinct bristles above; claws with rather large subbasal tooth. Wings black, broadly deeper on apex; second and third submarginals subequal, both narrowed above, both recurrent veins ending beyond middle of cells, second recurrent arising before middle of anal cell, extending obliquely and rather sinuously to the third submarginal; veins do not reach apical margin. Length, 7 mm.

From Southern Pines, N. C., July (Manee).

Resembles *P. subviolaceus*, but the cilia of anterior tarsi are very much longer.

***Psammochares marginalis*, new species.**

Female.—Near *P. marginatus*, but larger, darker and red of the abdomen more extensive, and basal veins interstitial in front as well as hind wings (in *P. marginatus* dislocated more or less in front wings). Black; clypeus faintly rounded in front, vertex not as narrow as *P. marginatus*, slightly rounded; a distinct line from antennæ to ocelli; third joint of antennæ not nearly as long as width of vertex; pronotum angulate behind; metathorax short, rounded, with median line; third abdominal segment mostly reddish, last dull, punctate, hairy; legs black, anterior tarsi ciliate; longer spur of hind tibiæ two thirds as long as metatarsus; all legs strongly spined. Wings black; marginal cell rather short and broad, acute at tip; second submarginal trapezoidal, barely longer than broad, receiving first recurrent near tip; third submarginal triangular, but not petiolate, nearly as long as second, second recurrent vein arising from middle of anal cell, slightly bowed outward above middle, meeting third submarginal beyond middle.

Male.—Similar, but with a little silvery pile on face. Length, 13 mm.

From Southern Pines, N. C. (Manee).

***Psammochares minusculus*, new species.**

Female.—Black, with silvery pubescence. Clypeus slightly truncate; antennæ short, stout, third joint barely longer than the first; a line from antennæ to ocelli; anterior ocellus scarcely two diameters from the laterals; vertex broad, only slightly convex; pronotum not very long, arcuate; metathorax short and broad, rounded, with median groove; abdomen suboval, broad at base, legs with moderate spines; anterior tarsi ciliate, the spines longer than width of a joint, longer spur of hind tibiæ two thirds length of the metatarsus; wings dusky, darker at tip, marginal cell short, acute; second submarginal

narrowed above, receiving the recurrent before the middle; third submarginal very small, long petiolate; second recurrent arising before middle of outer cell, running nearly vertically to middle of third submarginal cell. Male much more slender, more silvery on face and metathorax. Length, 4.5 mm.

From Fedor, Lee Co., Texas, June (Birkmann). Resembles a minute *P. subviolaceus*.

***Psammochares posticatus*, new species.**

Black, face and clypeus silvery, posterior margin of pronotum broadly white, metathorax behind and pleura and coxæ slightly silvery; abdomen rather dull black, last segment white above; legs black, anterior tarsi brownish, hind tibiæ white above from base to beyond middle; joints 1, 2, 3 and 4 of hind and mid tarsi white, with black on apical parts, joint 5 all black; spurs white; wings nearly hyaline, a very broad black band across tip, covering marginal cell. Anterior margin of clypeus truncate; third joint of antennæ no longer than fourth, not half the width of vertex, posterior margin of pronotum subangular; metathorax nearly evenly convex; abdomen slender; legs long, longer spur of hind tibia about two thirds the length of metatarsus. Marginal cell of wing long, acute; second submarginal acute at base, narrowed above, receiving the first recurrent much beyond the middle; third submarginal not much longer than the second, one half narrowed above; second recurrent vein arises much beyond middle of anal cell, scarcely bent, meeting the third submarginal near middle. Length, 10 mm.

From Fedor, Lee Co., Texas, Oct. (Birkmann).

***Psammochares pretiosa*, new species.**

Male.—Small, black with dense silvery pubescence; abdomen red above on apical part of segment one, all of two, and basal part of three. Head rather narrow; clypeus truncate, almost concave; antennæ short; vertex convex; anterior ocellus large, once and a half its diameter from the smaller laterals; pronotum moderately long, arcuate behind; the metathorax obliquely sloping, not much convex, narrowed behind; abdomen long cylindric, the segments beyond the red are silvery on apical part and brown on basal part. Legs not very slender; longer spur of hind tibiæ fully one-half length of the metatarsus; wings brown, darker at tip; second and third submarginal cells subequal, third narrowed nearly to a point above, second recurrent arising from middle of anal cell and running nearly straight to middle of the third submarginal, marginal cell short and broad. Length, 7.5 mm.

From Sea Cliff, Long Island, N. Y., on the beach.

Related to *P. marginatus*, but easily separated by the densely silvery pubescence, and larger amount of red on the abdomen.

***Psammochares striatulus*, new species.**

Female.—Black, with only short fine hair. Clypeus broadly concave, margined; antennæ long, slender, third joint as long as width of vertex; a

distinct median line from antennæ to ocelli, anterior ocellus about diameter from smaller laterals; vertex slightly rounded; pronotum slightly constricted at hind margin, arcuate; metathorax rather long, evenly convex, posterior part distinctly transversely striate, abdomen shining; short, rather broad at the base; hind tibiæ with very few small spines, metatarsus very long, about twice as long as longer spur. Wings black, barely paler in the third submarginal cell; second submarginal one and one fourth times as long as broad; third nearly as long, slightly narrowed above, receiving the second recurrent at middle, this vein arising much beyond middle of anal cell, and slightly bent below middle; basal veins interstitial in fore wings, slightly dislocated in the hind wings. Length, 11 mm.

From Palmerlee, Ariz. (Biederman).

Closely related to *P. luctuosus*, but with mesothorax striate, a more evenly colored wing, longer second submarginal cell, longer hind tarsi, and less spinose tibiæ.

***Psammochaeres ventralis*, new species.**

Male.—Black, rather dull and not shining, head and thorax with black hairs; clypeus broad, slightly emarginate in front; vertex nearly straight across; a faint line from antennæ to ocelli; antennæ short and heavy; ocelli large, close together, the anterior ocellus not its diameter from the laterals; pronotum angulate behind; metathorax rather short and narrow, with long black hairs; abdomen slender, cylindrical, apical segments depressed, beneath on penultimate segment there is a tuft of long black hair each side, on preceding segment there is a dense brush from side to side, outer hairs longest, on the segment before this is a sparse brush, the middle hairs of which are very short. Wings black; marginal cell rather short, acute; second submarginal narrowed above, third subtriangular, nearly as large as the second, receiving the second recurrent at middle, the vein bent out at middle, and arising from the anal cell before middle; the veins do not reach apical margin; basal veins nearly interstitial in both pairs. Length, 9 mm.

From Falls Church, Va., 22 Oct.

***Cryptocheilus arcuatus*, new species.**

Female.—Blue black, except the reddish abdomen; all with short pile; clypeus and lower part of face silvery, pleura silvery; legs dull black; spurs yellowish; wings grayish, tip infuscated. Clypeus slightly rounded in front; third joint of antennæ stout, not more than two thirds width of vertex; lateral ocelli as near to eyes as to each other; vertex nearly straight across; pronotum arcuate behind; metathorax short, not as long as broad, sloping to tip, but little convex; abdomen petiolate, shining reddish yellow, scarcely darker toward tip, and there with yellowish hair; legs with very short hairs and spines on tarsi, none below on last joint of hind tarsus; about eight teeth above on hind tibiæ, the metatarsus three fourths as long as tibia, the

longer spur is about one half the length of metatarsus. Marginal cell of wings slender, acute; second submarginal one and a half times as long as broad, receiving the first recurrent vein a little before the middle; third submarginal a little longer and wider than second, one third narrowed towards the marginal, second recurrent arising plainly beyond middle of anal cell, slightly bent above middle, meeting third submarginal barely before middle. Length, 7 mm.

From Fedor, Lee Co., Texas (Birkmann).

Cryptocheilus coloradensis, new species.

Female.—Reddish yellow throughout; a narrow black line connecting tops of eyes and with median extension covering the ocelli, hind borders of thoracic parts black, metathorax with base, anterior angles, and median stripe black, pleura with two broad oblique black stripes, extreme base of abdomen black, parts of coxæ and trochanters black, last two joints of four hind tarsi black; wings reddish black. Clypeus large, rounded, margined; antennæ long and slender, third joint nearly as long as vertex width; anterior ocellus hardly diameter from the laterals; vertex straight across; pronotum short, subangulate behind, scutellum broad, metathorax narrowed behind, oblique, barely rounded, with very long yellow hair. Abdomen moderately slender, anterior femora slender, coxæ I long-haired; spurs on legs rather short, the longer one on hind tibia not one half the length of very long metatarsus; hind tibiæ strongly serrate, claws with basal tooth; no spines under last hind tarsal joint. Wings rather long, marginal cell long, second submarginal nearly twice as long as broad, narrowed above, first recurrent at middle; third submarginal much larger and longer than second, nearly one half narrowed above, second recurrent arising much beyond middle of anal cell, running sinuously to middle of the third submarginal. Length, 15 mm.

From Clear Creek, Colo., 11 Sept. (Oslar).

Cryptocheilus pallescens, new species.

Honey yellow throughout, blackish each side of the scutellum, at middle tip of the metathorax, and the petiole of the abdomen black; antennæ dusky from third segment outward; legs slightly dusky on middle and hind tarsi. Clypeus slightly but evenly rounded in front; face smooth, with very short sparse hair; third joint of antennæ much shorter than width of vertex; lateral ocelli rather farther from eyes than from each other; thorax shining, hind margin of pronotum angulate; metathorax evenly sloping to tip; abdomen petiolate, shining, with long hairs near tip, last segment above with short yellow hair. Legs slender, with few hairs except on hind tibiæ; about nine teeth above on hind tibia; spurs yellowish, longer of hind tibia about two fifths of metatarsus; the hairs and spines on tarsi yellowish and very short, last joint of hind tarsi without spines beneath, claws with small tooth beyond middle, hind metatarsus four fifths as long as tibia. Wings slightly dusky, rather darker before the middle, and a cloud over marginal, submarginal and

part of discoidal cells, apex also darkened; marginal cell of moderate length, second submarginal one and a half times as long as broad, with first recurrent before middle; third submarginal barely longer than second, wider than second, narrowed one third toward marginal; second recurrent leaving the anal cell scarcely beyond the middle, outwardly angular above middle, meeting the third submarginal at middle. Length, 7.5 mm.

From Falls Church, Va.

Cryptocheilus placitus, new species.

Female.—Black, lower half of clypeus, antennæ, legs and abdomen yellowish-red. All with very fine dense silvery pubescence, most prominent on sides of pleura and metathorax. Clypeus broad, truncate in front; antennæ slender, third joint but little longer than the fourth; face rather broad, a line from antennæ to ocelli; anterior ocellus two diameters from laterals; vertex slightly convex; pronotum subangulate behind; metathorax slightly and evenly rounded, with a broad median furrow; abdomen subpetiolate, slightly compressed near tip, last segment with yellowish hair. Legs slender, hind tibiæ strongly serrate, the longer spur two fifths of metatarsus; tarsi very slender, first plus second joints of hind tarsi much longer than tibiæ, last joint of hind tarsus beneath without spines. Wings hyaline, tip fumose; third submarginal cell larger than the second, both recurrences meeting cells at the middle, the second recurrent arising from middle of anal cell, and slightly bent outward above middle. Length, 7 mm.

From Fedor, Lee Co., Texas (Birkmann).

Pedinaspis australis, new species.

Male.—Black, with black hair on head and thorax; head narrower than thorax; clypeus truncate in front; a line from antennæ to ocelli; anterior ocellus fully twice its diameter from the laterals; vertex rounded; antennæ very short and thick, not nearly as long as thorax; some gray hairs on sides of face; pronotum long, broader behind, margin slightly arcuate; metathorax nearly level, long, rather narrowed and emarginate behind, scutellum broad; abdomen cylindrical, not longer than thorax, the apical segments with silvery hair; the tip shows below a short forked process and before it a single median tooth; the legs are short and spiny, tibia I not twice as long as spurs, femur cylindrical, the coxæ I do not reach hardly more than half way across the mesosternum, which is very long, and on the middle behind with a lobe projecting over the base of coxæ II; longer spur of hind tibia two thirds as long as metatarsus; no spines below last joint of hind tarsus; all claws with tooth; hind femora very heavy. Wings black, basal veins interstitial, marginal cell acute, second submarginal narrowed above, third shorter and also narrowed above, second recurrent at middle, straight, arising from middle of anal cell, veins not reaching the apical margin. Length, 11 mm.

From Fedor, Lee Co., Texas (Birkmann).

***Pedinaspis luctuosa*, new species.**

Female.—Reddish yellow, antennæ beyond fourth segment black; abdomen mostly dull black, second segment with a large pale yellow spot each side, third segment with a pale basal band, narrowly interrupted in the middle, fifth and apical segments with silvery pubescence, sides of metathorax silvery; legs reddish yellow, tibiæ and tarsi darker, spines pale. Clypeus subtruncate in front; antennæ short, third joint not longer than fourth; faint line above antennæ not reaching ocelli, latter very small, anterior ocellus fully four times its diameter from the laterals, and these as near to eyes as to each other; vertex nearly straight across. Pronotum very long, scarcely arcuate behind; metathorax short, bent down behind and transversely striate; abdomen short, dull, slightly heavy at tip and on venter; legs with few small spines on tibiæ, longer spur of hind tibiæ not quite one half the length of the metatarsus. Wings as in *P. mariæ* and *P. legatus*; yellowish, with basal, narrow submedial, and broad apical fuscous bands; hind wings dusky at tip; venation as in *P. legatus*. Length, 9 mm.

From Fedor, Lee Co., Texas, 29 May (Birkmann).

Differs from *P. mariæ* and *P. legatus* in colors of abdomen and legs, and in the much smaller and more separated ocelli.

***Planiceps pulchella*, new species.**

Female.—Black, abdomen and most of hind femora red, clypeus emarginate; antennæ short, third joint shorter than fourth and shorter than first; vertex straight across; anterior ocellus about one diameter from laterals, latter as near to each other as to the eyes; pronotum long, transverse behind; metathorax rather long, broadest in middle, posterior slope rather concave in middle; abdomen no longer than thorax, compressed toward tip. Anterior legs short, their femora thickened; hind femora red inside and middle of outer side, tibiæ weakly spinose, longer spur of hind tibiæ not one half the length of metatarsus. Wings rather short; marginal cell not very long, but acute, second submarginal very short, broader than long, the first recurrent interstitial with its base, second recurrent before the tip, the second discoidal cell is therefore much broader than long. In the hind wing the cross-vein from upper fork of median vein meets the radial sector close to base (not far out as in most species of this family). Length, 5 mm.

From Falls Church, Va., 21 July; a smaller example from Fedor, Lee Co., Texas (Birkmann), has the middle femora and hind tibiæ reddish.

***Pseudagenia apicipennis*, new species.**

Male.—Black, abdomen and legs mostly reddish yellow; clypeus and basal joint of antennæ above and below yellowish, rest of antennæ brown. Clypeus broadly truncate in front; antennæ rather higher up than usual; face not very long, with fine silvery pubescence, anterior ocellus about its diameter from

the laterals; thorax with silvery pubescence, pronotum arcuate behind, metathorax short, rounded; abdomen very slender, pale yellowish red on the basal half, beyond black, apical segment white above; the legs, including coxæ, are yellowish red, but the middle and hind tarsi are blackish brown, hind tibiæ also brownish; the spurs white. Wings hyaline, apex dark; marginal cell acute at tip, third submarginal cell hardly as long as the second, but little narrowed above, second recurrent vein arising beyond middle of anal cell, running nearly vertically to middle of third submarginal cell; basal veins almost interstitial; stigma dark. Length, 6 mm.

From Fedor, Lee Co., Texas (Birkmann).

***Pseudagenia birkmanni*, new species.**

Male.—Black, spurs white, base of abdomen reddish, apical segment white above; most of body with silvery pubescence. Clypeus truncate; vertex rounded; anterior ocellus rather more than diameter from the laterals; antennæ quite short, third joint but little longer than first. Pronotum subangular behind; metathorax short, rounded; abdomen slender, subpetiolate, segments one, two and most of three reddish both above and below, last segment white above. Legs slender, black, tarsi pale, longer spur of hind tibiæ more than one half length of metatarsus. Wings but little fumose, marginal cell long, acute, second and third submarginal cells subequal, plainly longer than broad, and slightly narrowed above, first recurrent vein before middle of second submarginal, second recurrent at middle of third submarginal, this vein arising from middle of anal cell, and faintly bent outward. Length, 6 mm.

From Fedor, Lee Co., Texas, June (Birkmann). A specimen from Glencarlyn, Va., is apparently the same, but the abdomen is reddish only on first and second segments, and the first has a blackish median spot.

***Pseudagenia externa*, new species.**

Female.—Black, with some slight white pubescence; the legs yellowish red, but the four hind tibiæ and tarsi are black on the outer side, also the anterior tibiæ slightly, and the first and second segments of the abdomen have on each side a distinct rufous spot; the spurs are yellowish, similar to the femora, not white. Clypeus truncate; head narrow, narrower than in *P. mellipes*; eyes large, and inner orbits subparallel; vertex nearly straight across; anterior ocellus a little more than diameter from the laterals; third joint of antennæ one and a half times as long as first; pronotum rather long, longer than in *P. mellipes*, subangulate behind, metathorax silvery on the posterior corners, narrower and less convex than *P. mellipes*; abdomen rather narrow, subcompressed near tip. Legs long and slender, hind tarsi rather longer than *P. mellipes*, the longer spur hardly one half length of metatarsus. Wings smoky, marginal cell rather short, not acute at tip, second and third

submarginal cells subequal, the third only slightly narrowed above and below, much shorter than in *P. mellipes*, first recurrent at middle of second submarginal cell, second recurrent before middle of third submarginal. Length, 7.5 mm.

From Fedor, Lee Co., Texas, 21 June (Birkmann).

***Pseudagenia metallica*, new species.**

Female.—Head black, with rather long white hair; silvery below the antennæ; thorax dark purplish metallic, metathorax with long white hair; abdomen purplish black, with fine grayish pile except on the first and apical segments, legs black. Clypeus large, rounded in front, margined; a faint line from antennæ to ocelli; antennæ short, but the third joint is nearly twice as long as the first; anterior ocellus a little more than diameter from laterals, these much nearer each other than to the eyes; inner orbits slightly and evenly concave; vertex nearly straight across, pronotum very short, slightly angulate behind; metathorax rather long, evenly rounded, median groove very faint. Abdomen rather long petiolate, slender toward tip and subcompressed, last segment concave above, beneath dull gray with some long white hairs; legs slender; anterior coxæ one half their length from reaching mid coxæ, middle and hind tibiæ spined much as in *P. blaisdelli*; longer spur of hind tibiæ scarcely one half length of metatarsus, no spines below on last hind tarsal joint. Wings slightly and evenly infusate; stigma black; marginal cell long, acute; second and third submarginal cells much longer than broad, the third rather larger, and one third narrowed above, first recurrent at middle; second recurrent arising much beyond middle of anal cell, bowed outward, and meeting the third submarginal before middle. Venation much as in *P. blaisdelli*. Length, 9 mm.

From Claremont, Cal. (Baker).

***Pseudagenia texana*, new species.**

Male.—Black, mostly with very short silvery pubescence, most evident on face and clypeus, some parts of thorax, and the coxæ. Clypeus slightly rounded, frontal stria very faint; vertex rounded; face rather long, anterior ocellus a little more than diameter from laterals; pronotum arcuate behind, mesothorax plainly tricostate above; metathorax elongate, faintly rounded; abdomen small, slender, apical segment white above. Legs slender, anterior pair rufous beyond the middle of femora, middle pair reddish on apical half of femora, tarsi brownish, hind pair with femora reddish, except extreme base, tibia with basal half somewhat reddish, tarsi black; longer spur of hind tibiæ reaching beyond middle of metatarsus. Wings grayish hyaline, apex darker, third submarginal cell barely longer than second, narrowed above, second acute at base, marginal cell rather blunt at tip, second recurrent arising beyond middle of anal cell, curving outward obliquely to middle of third submarginal; basal cross-veins interstitial; stigma dark. Length, 7 mm.

From Fedor, Lee Co., Texas (Birkmann).

Aporus apicatus, new species.

Male.—Black; pronotum with slight silvery pile in front and behind, not as dense as in *A. fasciatus*, hind angles of metathorax silvery; abdomen black, with apical third of segments with white pubescence. Wings blackish, paler near the marginal and second submarginal cells. Body slender, face shining above, silvery below antennæ; pronotum arcuate behind; hind angles of the metathorax sharp; abdomen slender. Legs stout, spined as usual; longer spur of hind tibiæ plainly shorter than the metatarsus. Wings with two submarginal cells, the second twice as long as broad, first recurrent vein near base, second recurrent plainly before tip. Length, 5 mm.

From Claremont, Cal. (Baker). Differs from *A. fasciatus* in having the first abdominal segment silvery only at tip, and in the shorter tibial spurs.

Aporus magnus, new species.

Male.—Black, with dense silvery pubescence, especially prominent on the clypeus, pronotum, posterior angles of metathorax, and on apical half of the abdomen, on the coxæ and legs. Clypeus rounded in front; antennæ very short, heavy and stout; vertex rounded; ocelli large, anterior ocellus about twice its diameter from the laterals, the latter farther apart than from the eyes; pronotum very large and long, barely arcuate behind; posterior margin of metathorax deeply excavate, angles prominent, as in other species; a basilar median furrow. Abdomen narrow, first and basal half of second segment dull black, rest of abdomen densely silvery pubescent. Legs silvery, with short black spines, longer spur of hind tibiæ more than one half as long as metatarsus; wings infusate toward apex, stigma dark, marginal cell acute; three submarginals, second and third subequal, the third a little larger, each but little longer than broad, each receiving a recurrent vein, the second beyond middle, the third at middle. Length, 12 mm.

From Fedor, Lee Co., Texas (Birkmann).

Ceropales robinsoni var. stigmatica, new variety.

Female.—Very similar in general to *robinsoni*, with markings heavier than in that species; the antennæ reddish or yellowish on basal half, only apical half black; and the stigma of the fore wings clear yellow. Venation very similar to that species, but the marginal cell is longer, also the third discoidal longer, and more of the tip hyaline.

From Fedor, Lee Co., Texas (Birkmann).

Ceropales bipunctata var. tibialis, new variety.

Female.—In general similar to *C. bipunctata*, but legs I and II from trochanter out are reddish yellow, and the hind trochanters, femora and tibiæ are also reddish-yellow, the rest of hind legs brown; in the male these apical joints are also reddish.

From Southern Pines, N. C., June (Manee).